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1. (Amended Twice) A user interface apparatus comprising:

a first sensor attached to a first portion of a body of a user;

a second sensor attached to a second portion of the user, which is different from the first portion;

means for estimating an action of the user on the basis of both the absolute positions of said first and second sensors and a relative position of the second portion with respect to the first portion, which are detected by said first and second sensors, and for generating action information corresponding to the estimated action of the user;

determination means for determining a user instruction corresponding to the generated action information, and

image generating means for generating an image on the basis of said user instruction.

2. The apparatus according to claim 1, wherein the first portion is a head.

3. The apparatus according to claim 1, wherein the second portion is a hand.

4. The apparatus according to claim 1, wherein said first sensor detects a location/posture of the first portion.

5. The apparatus according to claim 1, wherein said second sensor detects a location and posture of the second portion.

6. The apparatus according to claim 1, wherein the action information includes information which pertains to a state change of the second portion with respect to a location of the first portion, and information which pertains to a location change velocity of the state change.

7. The apparatus according to claim 1, wherein the action information includes information which pertains to a state change of the second portion with respect to a location or location/posture of the first portion, and information which pertains to a location change acceleration of the state change.

8. The apparatus according to claim 1, wherein the action information includes information which pertains to a posture of the second portion with respect to a posture of the first portion.

9. The apparatus according to claim 1, wherein the action information includes information which pertains to a moving direction of a location of the second portion with respect to a posture of the first portion.

10. The apparatus according to claim 1, further comprising:
means for storing a value of the relative position of the second portion with respect to the first portion, and a plurality of state values which are defined in advance as a result of transition of the value; and

means for storing a plurality of different user instruction values
corresponding to the plurality of state values.

11. The apparatus according to claim 1, wherein said determination means
decomposes the determined user instruction into a plurality of instruction operands, and
outputs the operands.

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12. The apparatus according to claim 1, wherein when said generation
means determines that a relative relationship between a location/posture of a head detected
by said first sensor, and a location/posture of a hand detected by said second sensor
indicates an action of the user whose line of sight is pointing to a predetermined portion of
the hand, said determination means outputs a user instruction for outputting an operation
guidance.

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13. The apparatus according to claim 1, further comprising a third sensor for
detecting a bent angle of a finger.

14. (Amended Twice) A game apparatus comprising:
a first sensor for detecting a location/posture of a head of a player;
a second sensor for detecting a location/posture of a hand or arm of the
player;
means for estimating an action of the player on the basis of both the
absolute positions of said first and second sensors and a change of a relative

location/posture of the hand or arm with respect to the location/posture of the head, which are detected by said first and second sensors;

means for outputting a player command corresponding to the estimated action, and

means for generating an image on the basis of the player command.

15. (Amended) The apparatus according to claim 14, further comprising display means for displaying images generated by said means for generating in front of the head of the player for the player.

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16. (Amended) The apparatus according to claim 15, wherein said display means is a head-mounted display.

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17. The apparatus according to claim 14, wherein three steps including preparation, execution, and return steps, are prepared for the player command, and the steps are respectively defined as:

a preparation action step for the player command when the location of the hand of the player moves to a position behind a position in front of a face of the player;

an execution step for the player command when the location of the hand of the player moves forward from a rear position after the preparation action; and

a return action step for the player command when the location of the hand of the player returns to a position of the face of the player after the forward movement.

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18. (Amended Twice) A user interface method for outputting a user instruction to a predetermined apparatus or program, comprising:

the step of detecting a location of a first portion of a body of a user and a location of a second portion of the user, which is different from the first portion, by using first and second sensors attached to the user; and

the step of estimating a user instruction by analyzing an action of the user on the basis of both the detected locations of the first and second portions and a relative position of the second portion with respect to the first portion, which are detected by said first and second sensors, and outputting the determined user instruction to the apparatus or program.

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19. The method according to claim 18, wherein said first and second sensors respectively detect locations/postures of the first and second portions.

20. The method according to claim 18, wherein the first portion is a head of the user, and the second portion is a hand of the user.

21. The method according to claim 18, further comprising the step of detecting information which pertains to a state change of the second portion with respect to a location or a location/posture of the first portion, and information which pertains to a location change velocity of the state change.

22. The method according to claim 18, further comprising the step of detecting information which pertains to a state change of the second portion with respect to a location or a location/posture of the first portion, and information which pertains to a location change acceleration of the state change.

23. The method according to claim 18, further comprising the step of detecting a posture of the second portion with respect to a posture of the first portion.

24. The method according to claim 18, further comprising the step of detecting a moving direction of a location of the second portion with respect to a posture of the first portion.

25. The method according to claim 18, further comprising the step of storing a value of the relative position of the second portion with respect to the first portion, and a plurality of user instructions which are defined in advance as a result of transition of the value.

26. The method according to claim 18, wherein the output step includes the step of decomposing the determined user instruction into a plurality of instruction operands, and outputting the operands.

27. The method according to claim 18, wherein when it is determined that a relative relationship between a location/posture of a head detected by said first sensor, and

a location/posture of a hand detected by said second sensor indicates an action of the user whose line of sight is pointing to a predetermined portion of the hand, the output step includes the step of outputting a user instruction for outputting an operation guidance.

28. The method according to claim 19, further comprising the step of detecting a bent angle of a finger from a third sensor.

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29. (Amended Twice) A computer readable storage medium, which stores a program of a user interface method for outputting a user instruction to a predetermined apparatus or program, storing:

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a program step of detecting a location of a first portion of a body of a user and a location of a second portion of the user, which is different from the first portion, by using first and second sensors attached to the user; and

a program step of estimating a user instruction by analyzing an action of the user on the basis of both the detected locations of the first and second portions and a relative position of the second portion with respect to the first portion, which are detected by said first and second sensors, and

outputting the determined user instruction to the apparatus or program.

30. (Amended Twice) A game apparatus for displaying a computer graphics image in front of a field of view of a player, comprising:

a first sensor for detecting a location of a first portion of a body of the player;

a second sensor for detecting a location of a second portion of the player, which is different from the first portion; and

game progress means for proceeding with a game by estimating a command the player wants to input by analyzing both the detected locations of the first and second portions and a change of a relative position of the second portion with respect to the first portion, which are detected by said first and second sensors, and executing the estimated command in a process of the game.

31. The apparatus according to claim 30, wherein said first and second sensors respectively detect locations/postures of the first and second portions.

32. The apparatus according to claim 30, wherein the first portion is a head of the player, and the second portion is a hand of the player.

33. The apparatus according to claim 30, further comprising means for detecting information which pertains to a state change of the second portion with respect to the location or a location/posture of the first portion, and information which pertains to a location change velocity of the state change, and

wherein the command is generated in further consideration of the detected velocity.

34. The apparatus according to claim 30, further comprising means for detecting information which pertains to a state change of the second portion with respect to

the location or a location/posture of the first portion, and information which pertains to a location change acceleration of the state change, and

wherein the command is generated in further consideration of the detected acceleration.

35. The apparatus according to claim 30, further comprising means for detecting a posture of the second portion with respect to a posture of the first portion, and wherein the command is generated in further consideration of the detected posture of the second portion.

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36. The apparatus according to claim 30, further comprising means for detecting a moving direction of the location of the second portion with respect to a posture of the first portion, and wherein the command is generated in further consideration of the detected moving direction of the location of the second portion.

37. The apparatus according to claim 30, further comprising a memory for storing a value of the relative position of the second portion with respect to the first portion, and a plurality of player commands which are defined in advance as a result of transition of the value.

38. (Amended) The apparatus according to claim 30, wherein said game progress means decomposes the estimated player command into a plurality of operands, and executes the command in accordance with the plurality of decomposed operands.

39. The apparatus according to claim 33, wherein when a relative relationship between a location/posture of a head detected by said first sensor, and a location/posture of a hand detected by said second sensor indicates that a line of sight of the player is pointing to a predetermined portion of the hand, said game progress means generates a player command for outputting an operation guidance.

40. The apparatus according to claim 30, further comprising a third sensor for detecting a bent angle of a finger.

41. The apparatus according to claim 1, wherein the action information further includes geometric information of the first and second portions in a reference coordinate system.

42. The apparatus according to claim 14, wherein said estimation means extracts geometric information of the first and second portions in a reference coordinate system, and estimates a player action on the basis of the geometric information.

43. The method according to claim 18, wherein the detection step includes the step of extracting geometric information of the first and second portions in a reference coordinate system.

44. The apparatus according to claim 30, wherein said game progress means further extracts geometric information of the first and second portions in a reference coordinate system, estimates an action of the player on the basis of the geometric information, and determines the command the player wants to input on the basis of the estimated action.

45. (Amended) An interface apparatus comprising:

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a first sensor for detecting a location or motion of a first portion of a body of a user;

a second sensor for detecting a location or motion of a second portion of the user, which is different from the first portion;

estimation means for estimating a command input by the user on the basis of patterns of the outputs from said first and second sensors by analyzing outputs from said first and second sensors; and

output means for outputting the command estimated by said estimation means to an object to be controlled.

46. The apparatus according to claim 45, wherein the first portion is a head, and the second portion is a hand.

47. The apparatus according to claim 45, wherein said first and second sensors respectively detect locations and postures of the first and second portions.

48. The apparatus according to claim 47, wherein said first and second sensors respectively detect location change velocities, location change accelerations, and moving directions of the first and second portions.

49. (Amended) The apparatus according to claim 48, wherein said estimation means analyzes an action of the user using information of a change in location, the location change velocity, location change acceleration, and relative moving direction of the second portion with respect to the first portion, and specifies a command corresponding to the action.

50. (Amended) The apparatus according to claim 49, wherein said estimation means has storage information which defines in advance a relationship between the action of the user and the corresponding command.

51. (Amended) The apparatus according to claim 50, wherein the command output from said estimation means is supplied to the object to be controlled, and an image corresponding to the command is displayed.

52. (Amended) A user interface method comprising:
the first detection step of detecting a location or motion of a first portion of a body of a user;
the second detection step of detecting a location or motion of a second portion of the user, which is different from the first portion;

the estimation step of estimating a command input by the user on the basis of patterns of the outputs of the first and second detection steps by analyzing outputs from said first and second detection steps; and

the output step of outputting the command estimated in the estimation step to an object to be controlled.

53. The method according to claim 52, wherein the first portion is a head, and the second portion is a hand.

54. The method according to claim 52, wherein the first and second detection steps include the steps of respectively detecting locations and postures of the first and second portions.

55. The method according to claim 54, wherein the first and second detection steps include the steps of respectively detecting location change velocities, location change accelerations, and moving directions of the first and second portions.

56. (Amended) The method according to claim 55, wherein the estimation step includes the step of analyzing an action of the user using information of a change in location, the location change velocity, location change acceleration, and relative moving direction of the second portion with respect to the first portion, and specifying a command corresponding to the action.